Design Course

Layout Design for Animation - Part II

Animation Color Technique

by
Gayathri Jeaks and Prof. Phani Tetali
IDC, IIT Bombay

Source:
https://www.dsource.in/course/layout-design-animation-part-ii

1. Introduction
2. Introduction to Staging
3. Principles of Perspective
4. Principles of Compositional Design
5. Production
6. Conclusion
7. Video
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9. Contact Details

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https://www.dsource.in/course/layout-design-animation-part-ii/introduction

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Introduction

In the first part of the course on Layout design for animation we covered the basics where we looked at the roles story, research and thumbnailing played in the design of a layout for an animated film.

A layout concept develop for a game project.
Image credits - Vajra Pancharia, Pubby Project.

In this part of the course, we will deal with one of the most important parts of layout design, staging. We will also delve into the principles which are foundational to staging, that is principles of perspective and the principles of compositional design.

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Introduction to Staging

Staging is essentially the composition of the scene; a clear representation of an idea within an environment. This idea can be an action, an emotion, an expression or a mood. Staging physically exhibits the internal emotions of the character so as to make the audience feel more connected to the character.

For example, look at the following scenes.

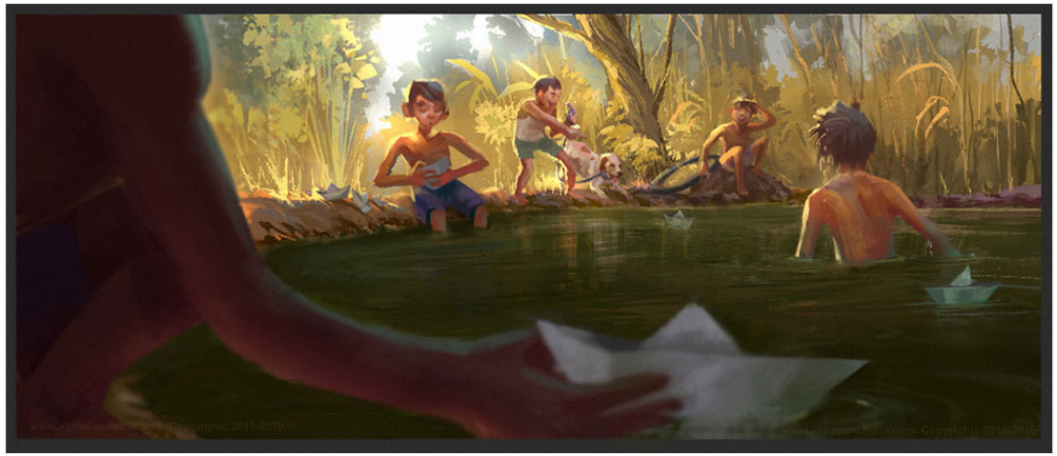

Image credits - *Vajra Pancharia.*

Image credits - *Vajra Pancharia.*

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Here, as we observe the actions of the characters between themselves and with the environment, and we make assumptions to assess the situation. We are given a slight glimpse into their life and we understand their world and the surroundings in which they live. This triggers the emotional life into the scene which is largely accomplished due to staging.

As layout artists, our primary objective is to design layouts which will lead the viewer's eye to the primary idea of the scene without much distractions so that it can aid in triggering an emotional response in the audience.

Good staging can be achieved by keeping some essential principles in mind. These principles can be broadly classified into:

- Principles of perspective.
- Principle of compositional design.

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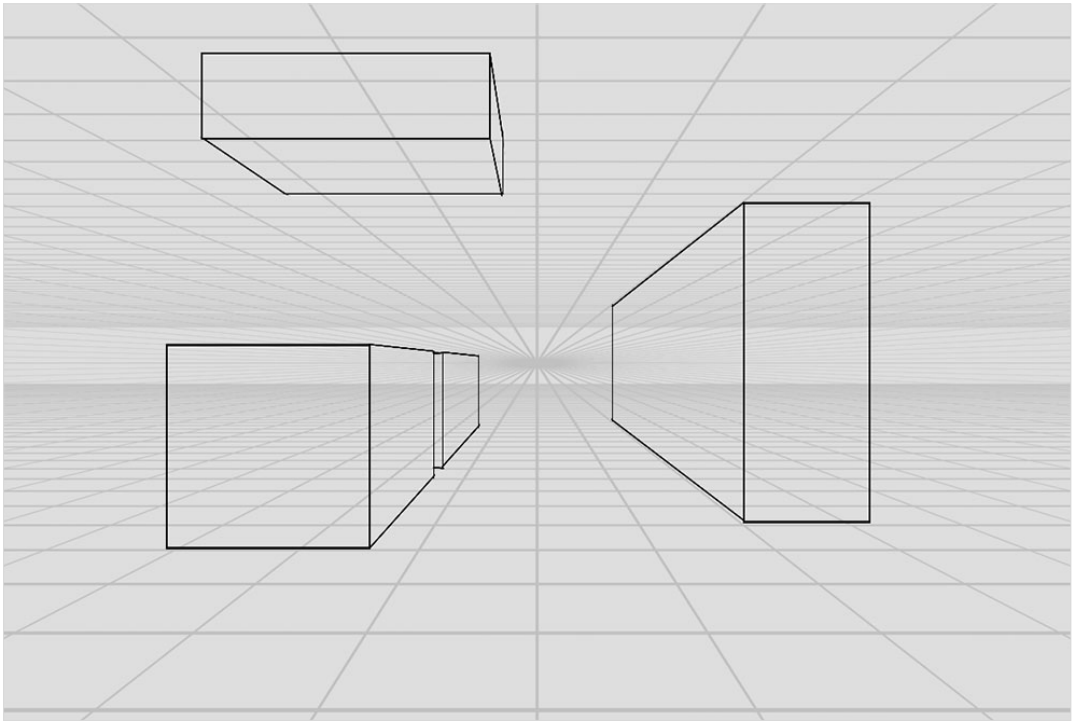
Principles of Perspective

If we go by the dictionary meaning, perspective is the art of representing a three-dimensional objects on a two-dimensional surface so as to give the right impression of their height, width, depth, and position in relation to each other. We are clearly able to understand its position in space as well. This helps a great deal in our layouts when we apply the principles of perspective into layout design.



Representation of three-dimensional objects on a two-dimensional surface.

Suppose we have to create an environment where a character standing in front of a house. Without perspective the character would look flat, but with perspective, they would look dynamic and the environment would feel more authentic.

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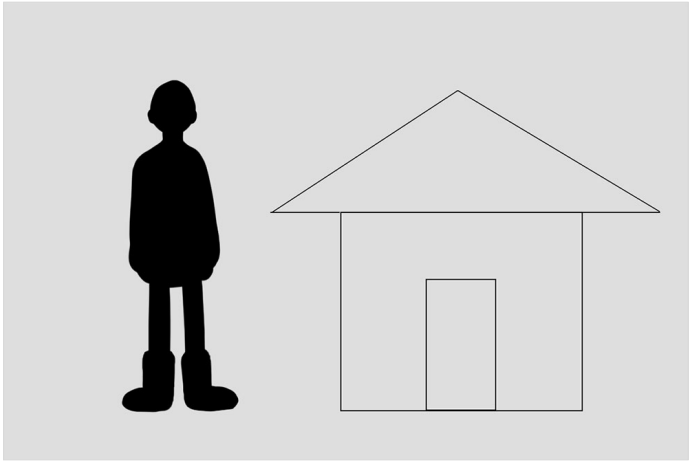

A character standing in front of a house.

The same character standing in front of a house but with the principles of perspective applied to it.

So basically, what perspective does is, it creates an illusion of space. A space where the character can walk around and interact with the elements placed in the environment.

For our understanding, perspective can be generally classified into three types. These classifications are based on the number of vanishing points in the perspective drawing. That depends on where we place the camera in the shot.

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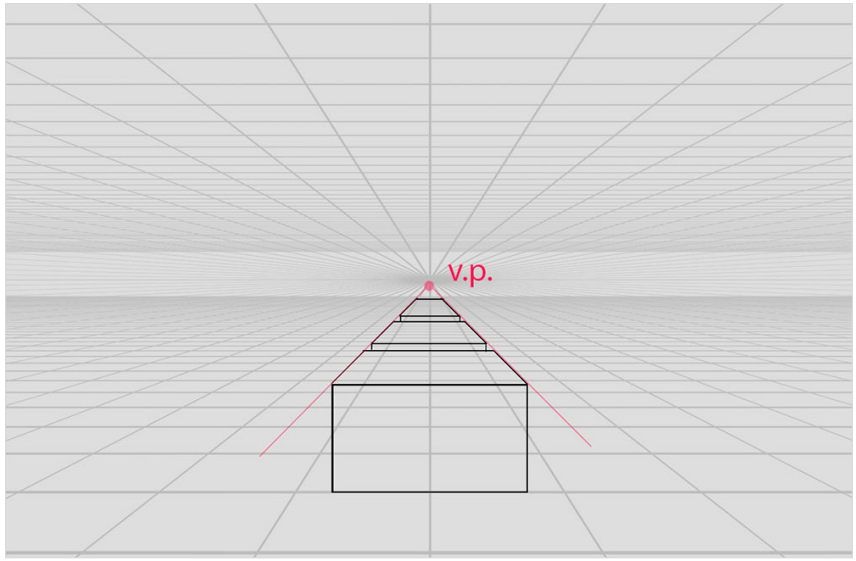
• One-Point Perspective.



Achieved with one vanishing point.

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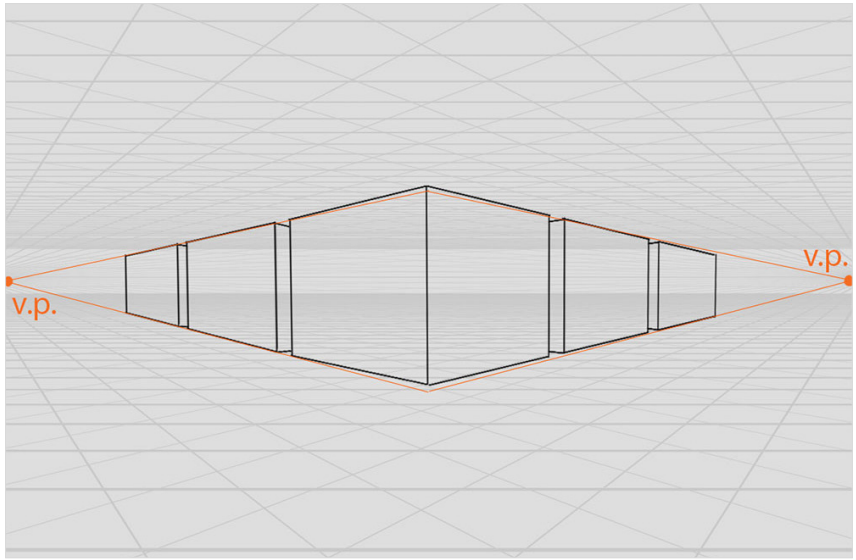
In the image above, we can see the lines leading to the single vanishing point.
Image credits: *Pixabay.*

• Two-Point Perspective.



Achieved with two vanishing points.

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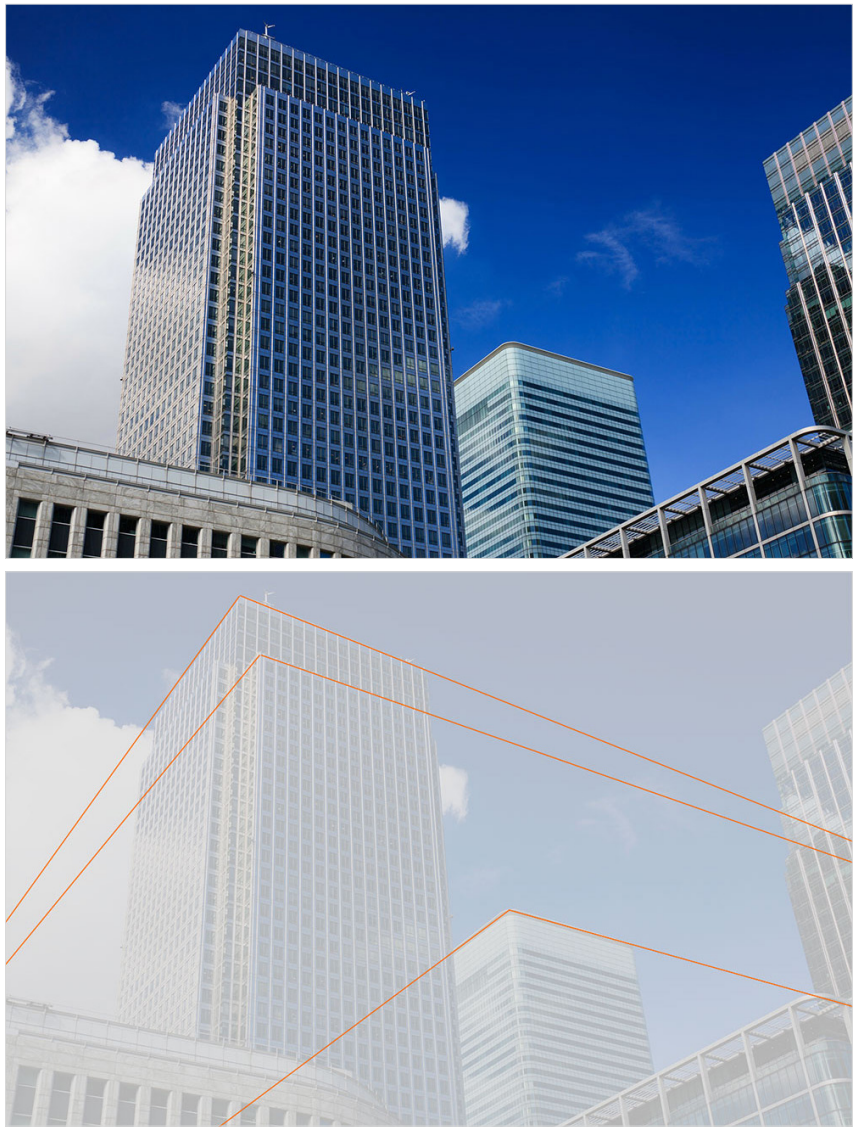

A real life example of two-point perspective. The lines lead out of the photograph to the two vanishing points outside the image.
Image credits: *Pixabay.*

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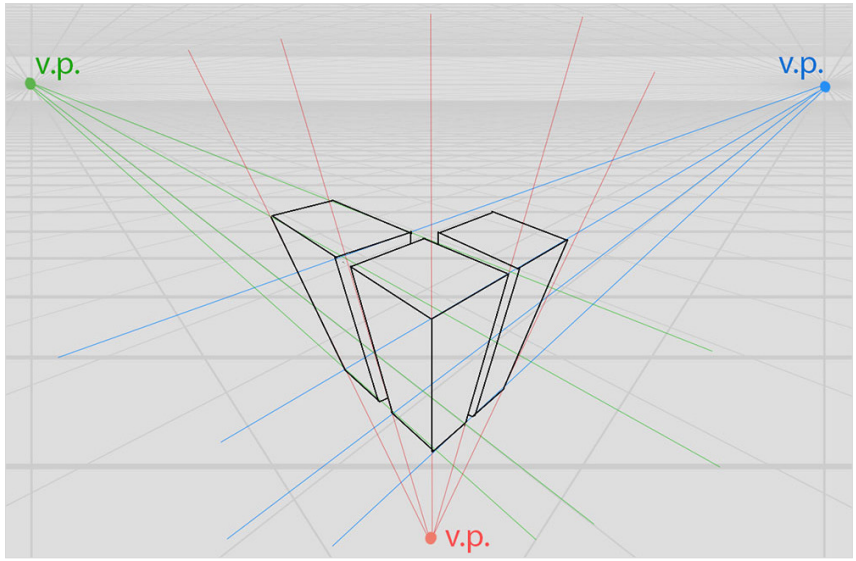
• Three-Point Perspective.



Achieved with three vanishing point.

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Three-point perspective is a bit complicated to achieve in real life, nevertheless when achieved it looks majestic. In the picture above, the lines lead to the vanishing points which are outside of our image.
Image credits: *Pixabay.*

Perspective helps us to make our fictional world more dynamic and authentic.

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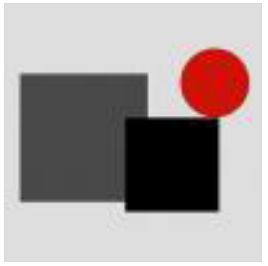
Principles of Compositional Design

Principles of compositional design are design principles which aid in making our compositions stronger and gives structure to our compositions.

Some of the Principles of compositional design are:

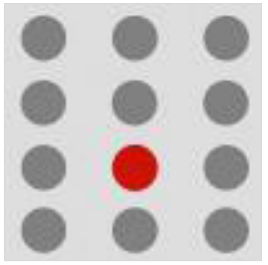
- Balance
- Contrast
- Movement
- Emphasis
- Unity

Balance



Contrast

Movement



Emphasis

Unity

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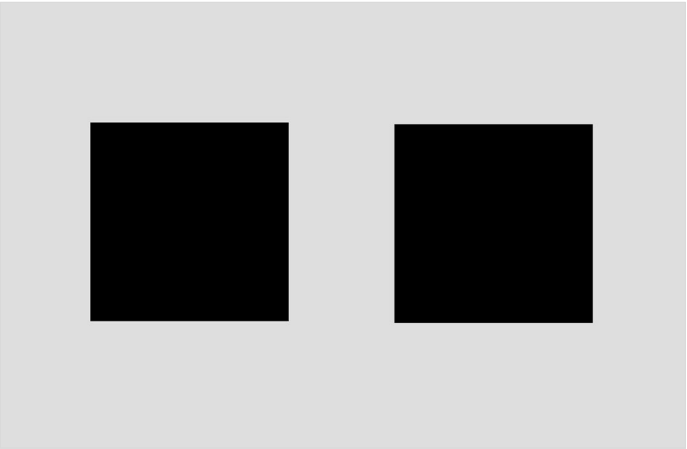
Balance

It refers to feeling of visual weight or equality of the composition.

Balance can be achieved in three different ways - through symmetry, asymmetry and radial.

• **Symmetry** - When both sides of the composition have the same elements balanced around an axis - It evokes the feeling of stiffness or formality in the composition. It is good to give a formal emotion to a composition but it is mostly static and boring.



Symmetrical balance is achieved when both the elements balance along an imaginary axis.

Symmetrical balance achieved in the real world.
Image credits - *Pixabay.*

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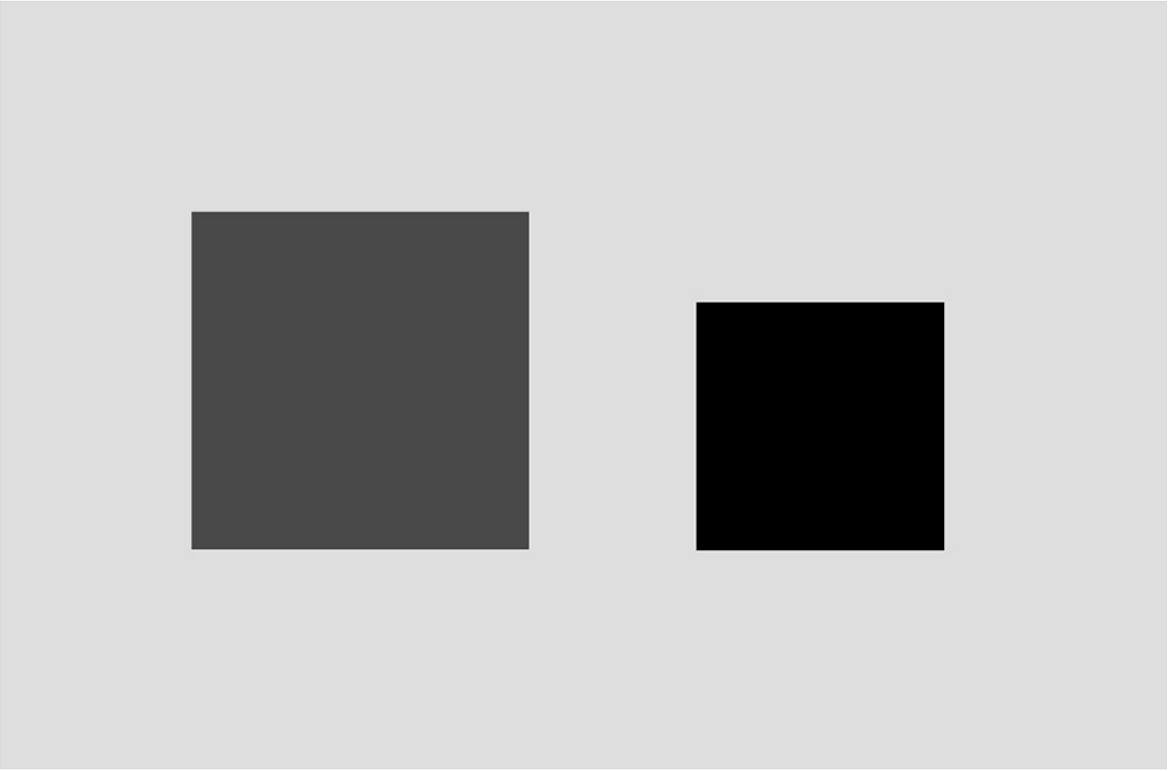
• **Asymmetrical Balance** - Here the visual balance is achieved by unequal visual weights in the composition - it can be created by contrasting elements, by manipulating the scale and proportion of the elements. they are similar in visual weights but are not mirrored.



Asymmetrical balance, is achieved when we balance the elements along an imaginary axis utilizing the features of the object. In the example above, the black box of smaller size on the right side is balanced by a bigger box with a slight value difference on the left side. Both of them together achieve balance in the picture.

Asymmetrical balance is more interesting and dynamic than symmetrical balance. It offers more visual variety and keeps the interest in the scene alive.

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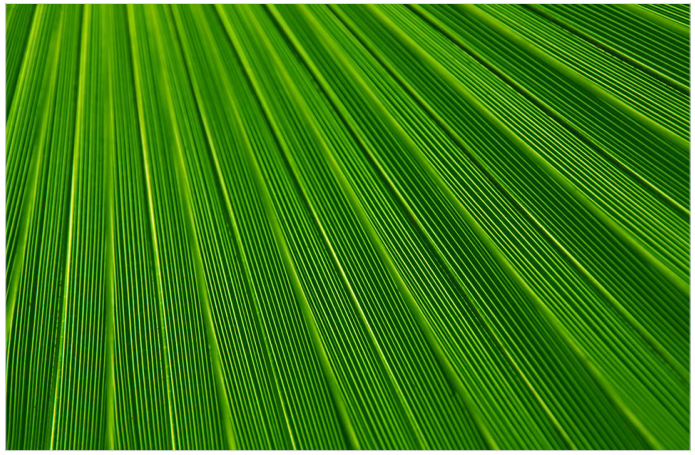
Asymmetrical balance achieved in the real world.
Image credits - *Pixabay.*

• **Radial Balance** - It is achieved when elements in the composition radiate outwards or towards from a common centre. Eg. ripples in a pond etc.

A perfect example of radial balance - Ripples.
Image credits - *Pixabay*



Radial balance exists almost everywhere in nature. This is an example of a palm leaf radiating outwards.
Image credits - *Pixabay.*

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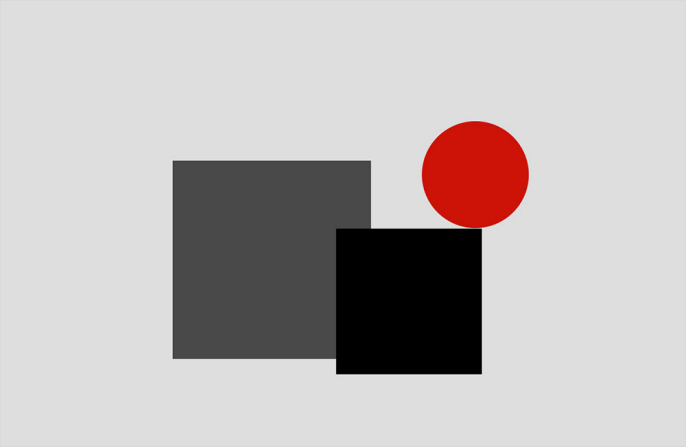
Contrast

Contrast is brought about by the difference between elements in the composition - contrasting elements attracts the viewer's attention by the juxtaposition. It creates a discord in the composition which adds to the visual interest.



Contrast achieved using contrasting elements in a composition.

Contrast in real life.
Image credits - *Pixabay.*

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Movement

Movement is the visual flow of the composition - it is used to direct the viewer's eye through the composition. A sense of movement can be achieved by using diagonal lines, curved lines, by the manipulating negative and positive space etc.

The artist has used the background nicely to make our eye move towards the two characters placed in the composition.
Image credits - *Vajra Pancharia.*

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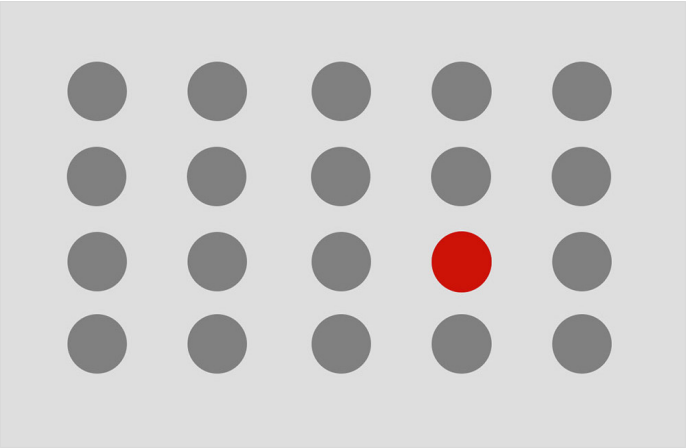
Emphasis

Like the word implies, is the one area in the composition which draws the attention of the viewer's eyes. It is also where the primary idea of the scene occurs. If there are more dominant areas in the composition, it will confuse the viewer and they wouldn't know where to look in the composition. By using all the other principles of design we will be able to bring about attention to the primary idea of the scene.



Emphasising a concept.

Creating emphasis in real life.
Image credits - *Pixabay.*

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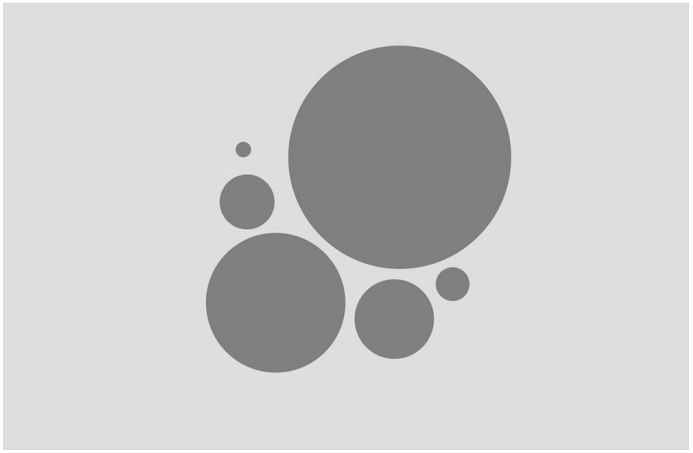
Unity

The composition should come together with similar units to have visual unity. It should feel that the elements in the composition come from the same type of elements.



Unity achieved using similar units.

Unity in real life.
Image credits - *Pixabay.*

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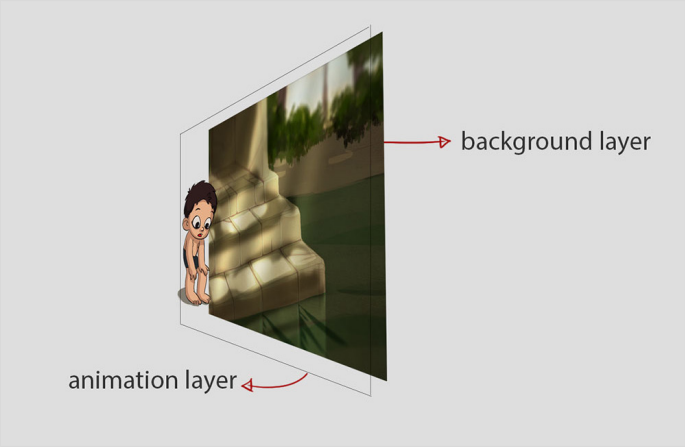
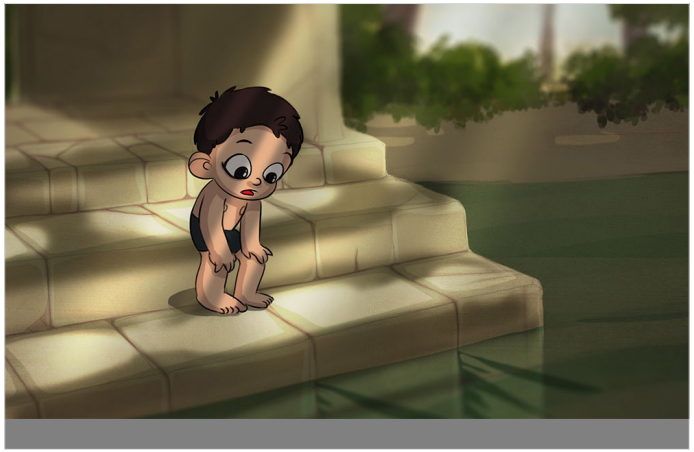
Production

Before we jump into making production layouts, we should understand certain technicalities regarding animation layouts.

During production, the layouts are always drawn in layers so as to separate the foreground, midground and background; and give enough space for the character or effects to playout without interfering with the background.



Separated background and animation layers.



The different layers combine together to give a complete production still.

Different names are given to these layers depending on where there are placed when a character animates in a scene. They are :

- An **overlay (OL)** is the layout which sits on top of the animation layer.
- An **underlay (UL)** sits below the animation layer.
- And the **background (BG)** is the one which sets the setting for the action. It provides the necessary information for the animator to stage the action.
- There is also an o**verlay/underlay(OL/UL)** layer, where the animation happens above and below the layout levels.

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The position of different layers which goes into production.

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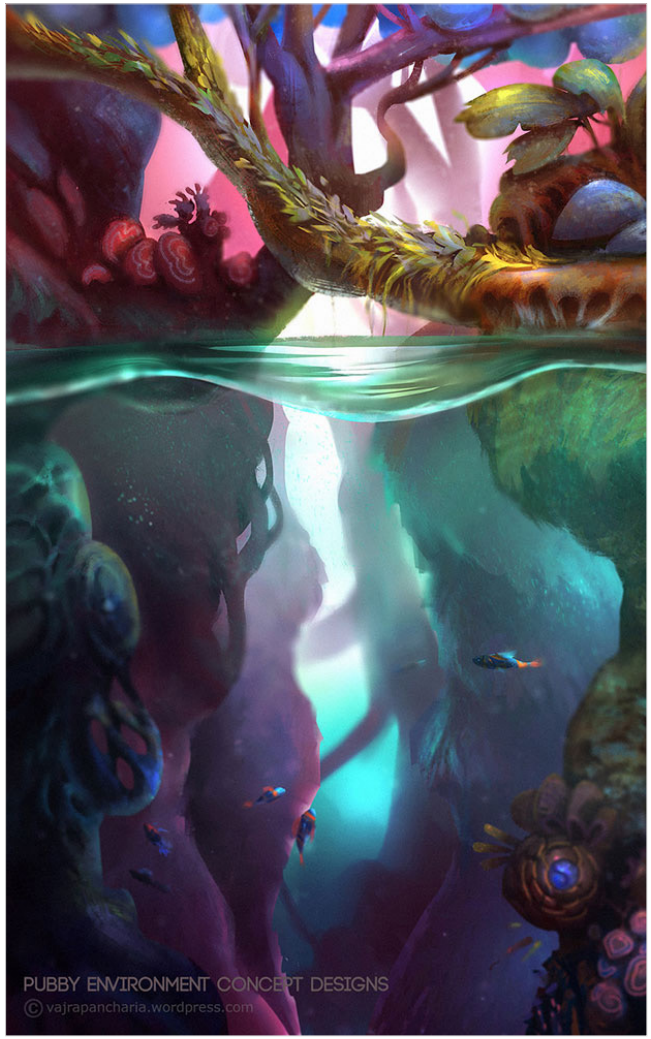
The dimensions of the layout vary according to the scene requirements. For eg. if there is a pan or a tilt, the layouts will be longer or taller accordingly.



An example of tilt/pan layout. The camera may tilt or pan from top to bottom or vice versa in a scene.
Image credits - *Vajra Pancharia, Pubby Project.*

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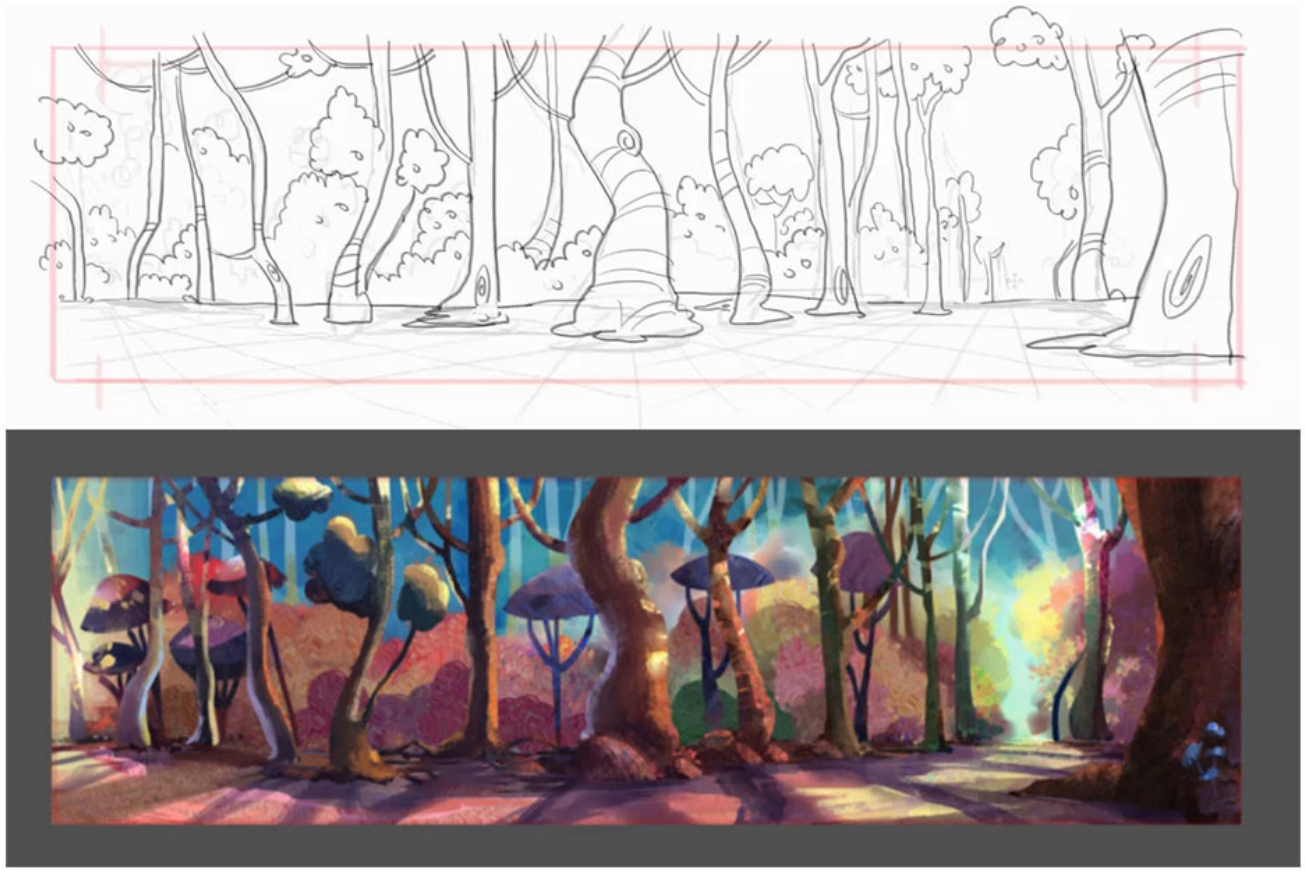
After the layouts are done they are painted by the background painters.



From an inked layout to final painted layout.

Design Course

Layout Design for Animation - Part II

Animation Color Technique

by
Gayathri Jeaks and Prof. Phani Tetali
IDC, IIT Bombay

Source:
https://www.dsource.in/course/layout-design-animation-part-ii/conclusion

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2. Introduction to Staging
3. Principles of Perspective
4. Principles of Compositional Design
5. Production
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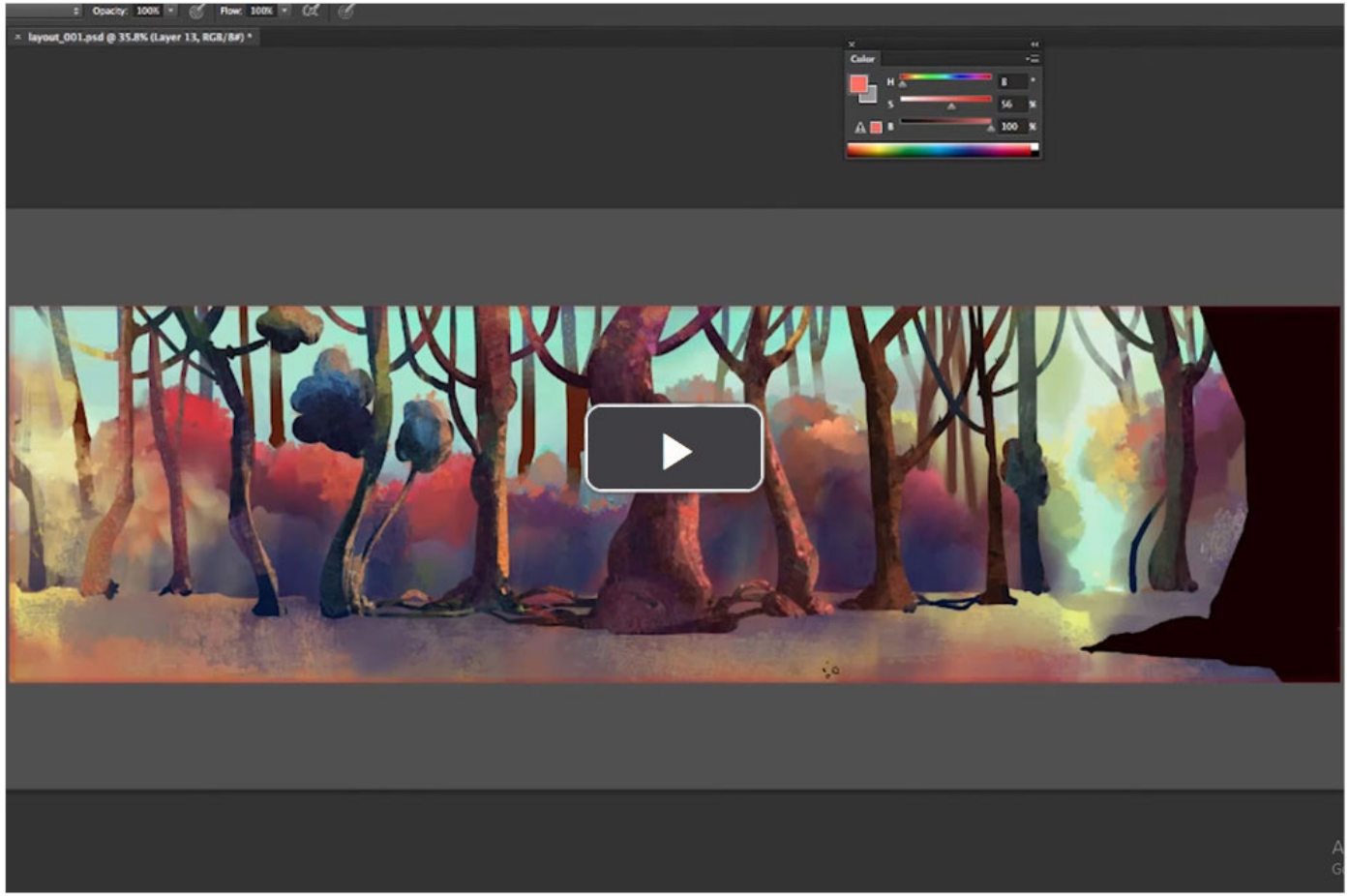
Conclusion

The following video documents the process involved in painting a layout.



Process documenting the painting of an inked layout design.

Design Course

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Source:
https://www.dsource.in/course/layout-design-animation-part-ii/video

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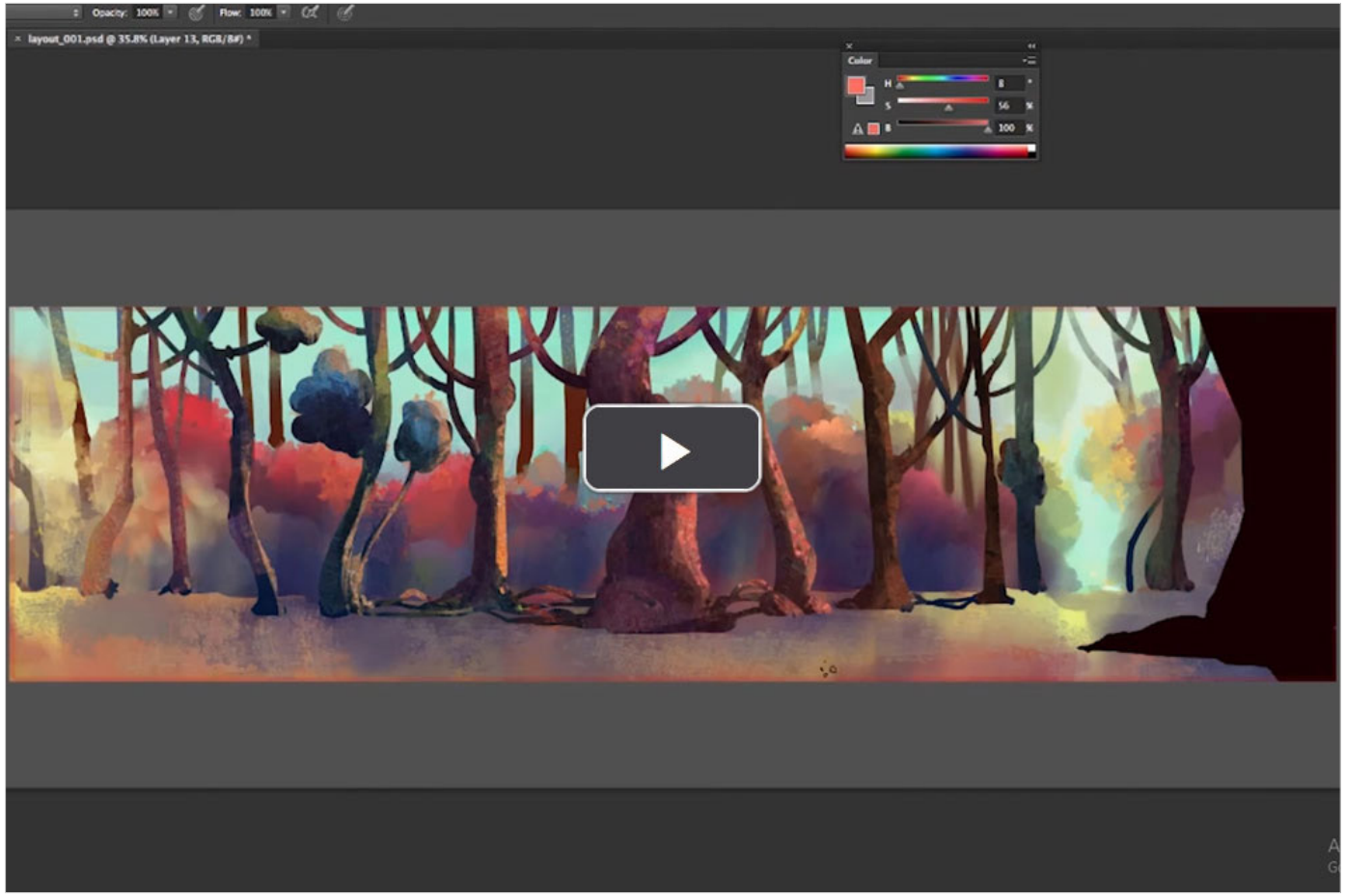
Video



Layout Design for Animation - Part 2

Design Course

Layout Design for Animation - Part II

Animation Color Technique

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Source:
https://www.dsource.in/course/layout-design-animation-part-ii/design-tools

1. Introduction
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Design Tools

Animation Design:

Animation is a method of photographing successive drawings, models or even puppets to create an illusion of movement in a sequence. Animation Tool is developed by IDC, IIT Bombay. It is an interactive web space where students can learn about the basics of animation. There are four main types of animation that are commonly used: 2D Traditional Animation, 2D Computer Animation, Stop Motion Animation, and 3D Computer Animation. There's also something called Experimental animation, where you can mix different types of animation together. The Animation Tool teaches things like Straight Ahead, Pose to Pose, Stretch and Squash, and Slow in Slow out, which are all important for making animations look good.

For more information visit: https://dsource.in/tool/animation_tool/

Design Course

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Source:
https://www.dsource.in/course/layout-design-animation-part-ii/contact-details

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Contact Details

This documentation was done by Gayathri Jeaks at IDC, IIT Bombay.

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